

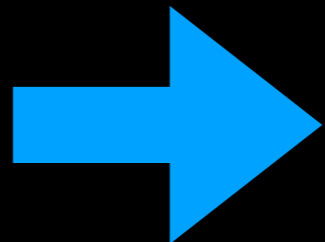
Open Science will never prevail
without a thorough revisiting
of the way evaluations of
researchers are conducted

Bernard Rentier

OAI11 - CERN-UNIGE Workshop on Innovations in Scholarly Communication
Geneva, June 20, 2019

Open Science: a paradigm shift

- Open Access
- Open Publishing



OSC

Open Scholarly Communication

Open flow:

free to publish

&

free to read

Public
Funding



Research



Public Funding

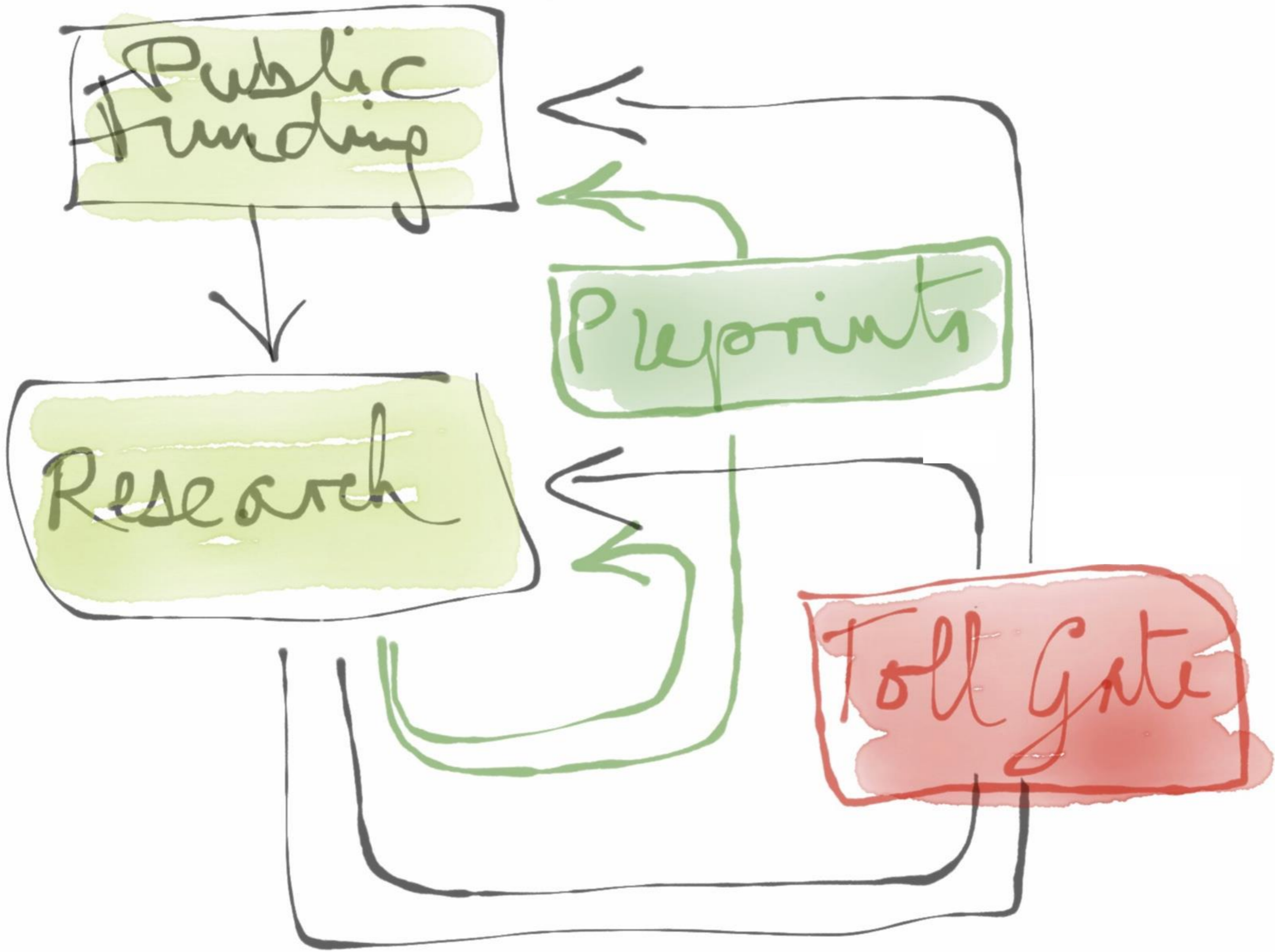


Research



Toll Gate



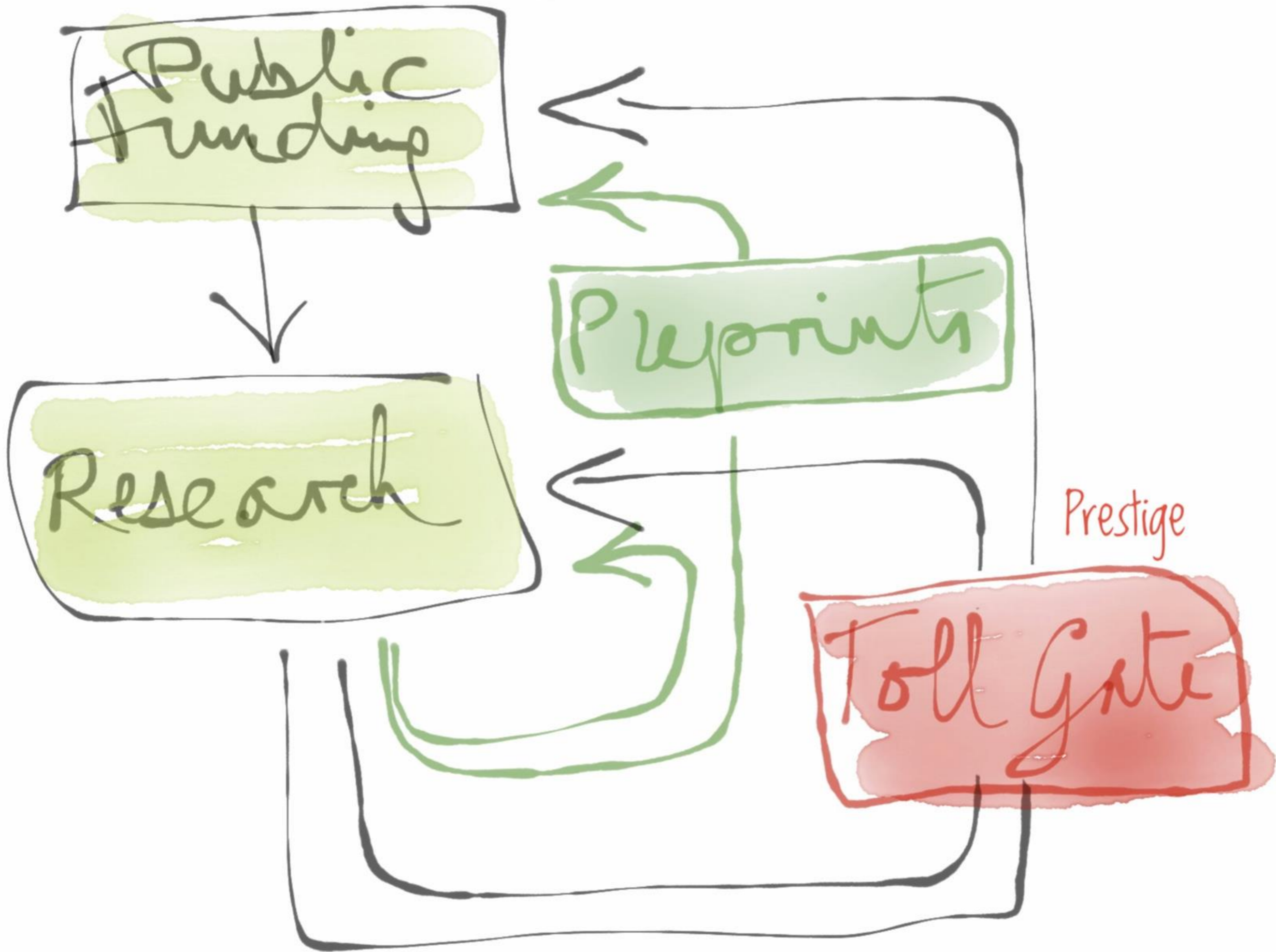


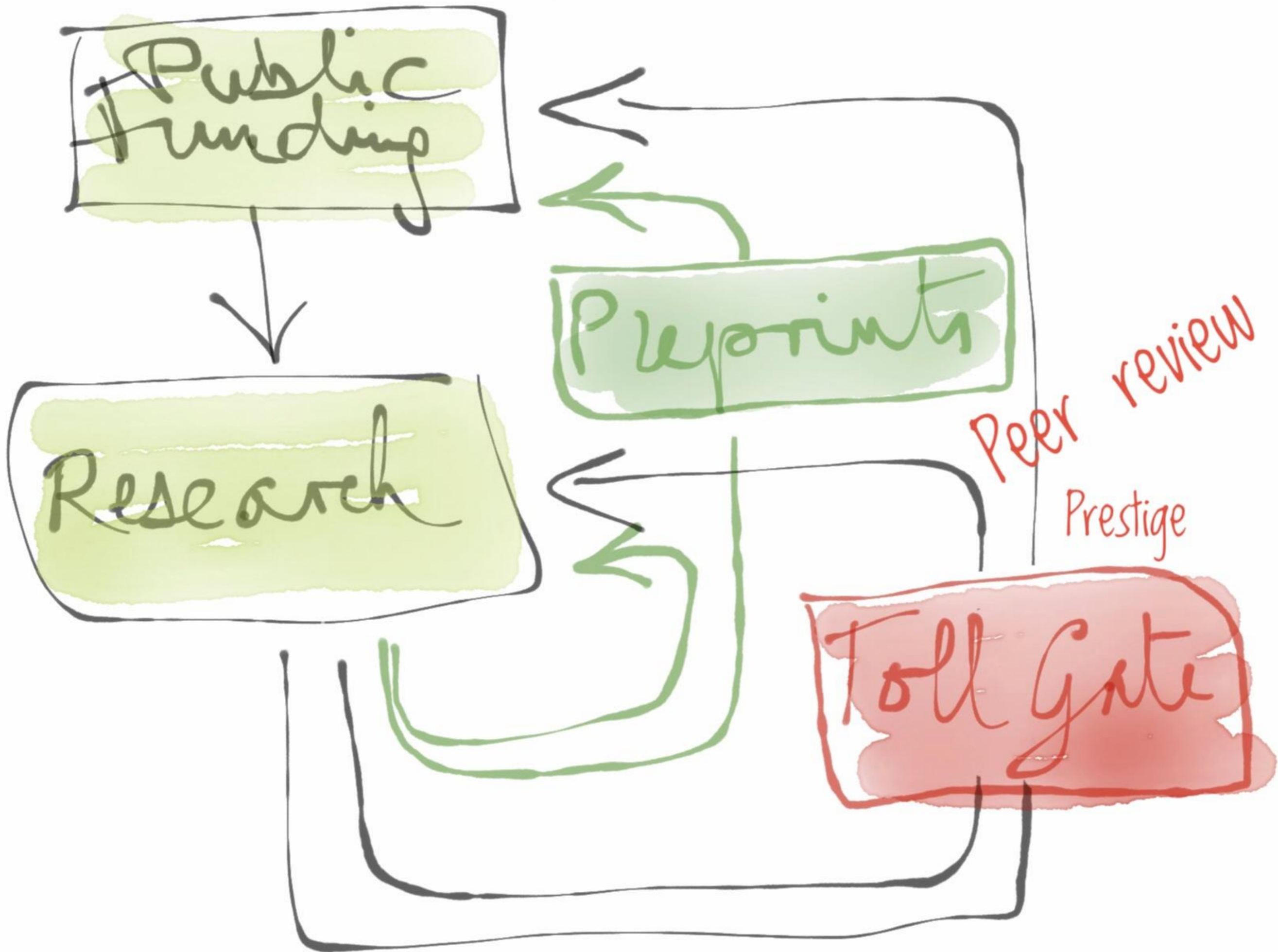
Public Funding

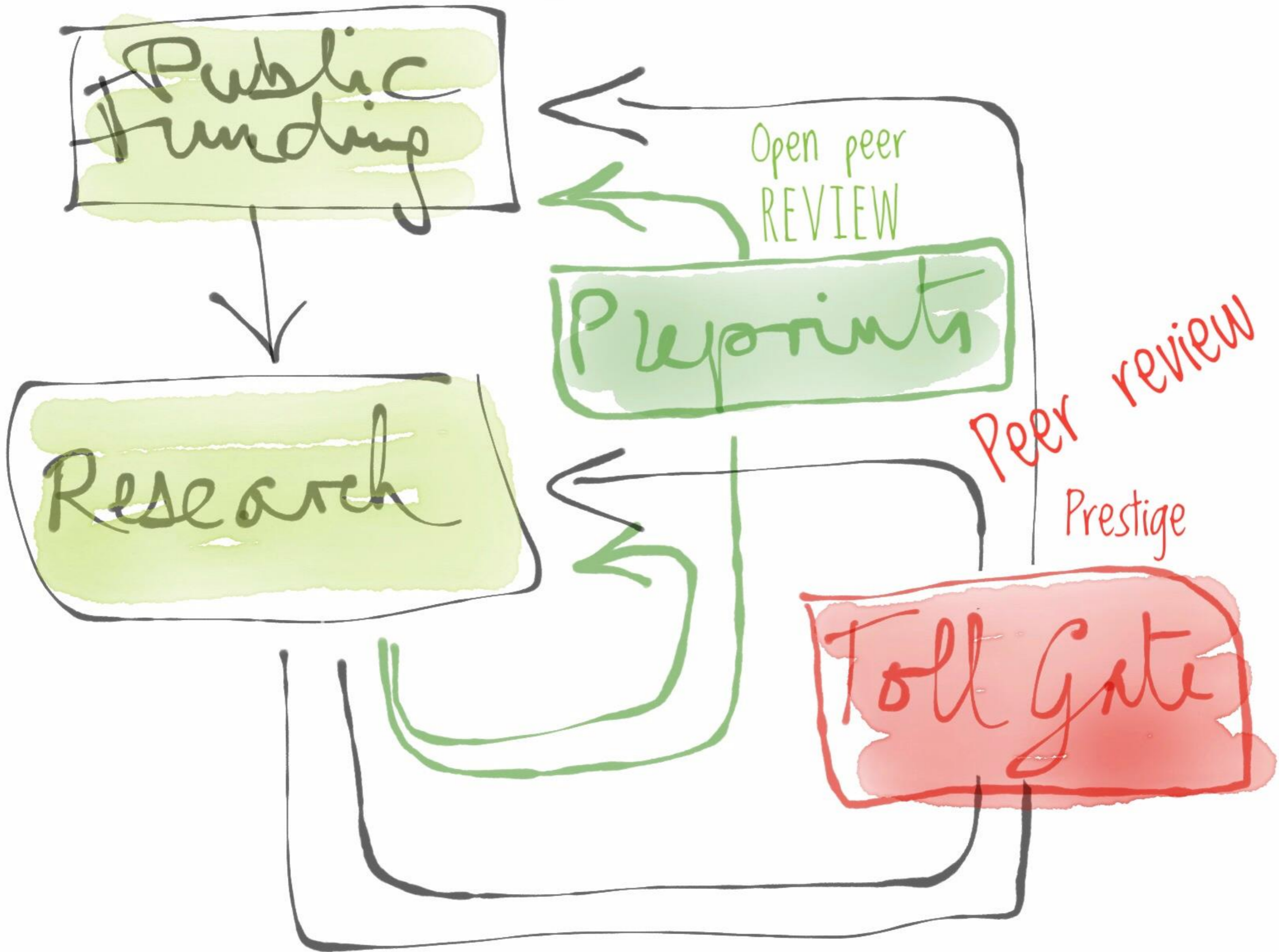
Research

Preprints

Toll Gate







Open Science: a paradigm shift

- Open Scholarly Communication
- Open citations
- Open Research Data
- Open Source Software
- Citizen Science

-
- *Open Education*

Why do we assess ?

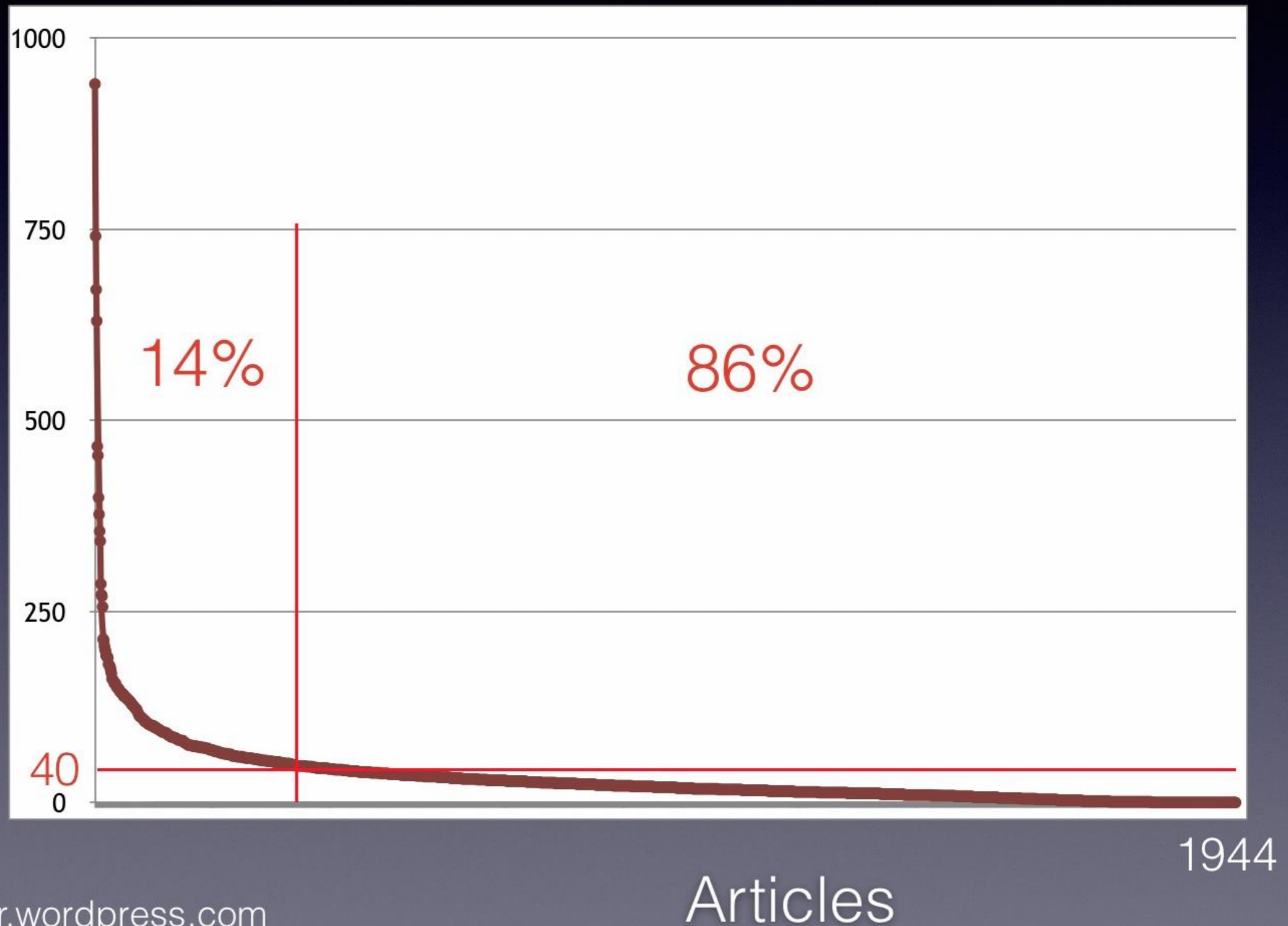
- Resources are scarce (money, time)
- Selection is permanently needed
- Researchers are accountable for public funds

How do we assess ?

- Today mostly on quick proxies (Journal Impact Factors,...), not enough on content and advancement of knowledge
- Impact of research is a good indicator but it should be clear which impact, on what and how to measure it

The Impact Factor Deception

Frequency of citations in 2014 per article published in *Nature* (FI=40) in 2012-2013



Why should we change ?

- Growing distrust and frustration
- Quantitative assessment generates competition, not sharing
- Quantitative metrics induce overpublication
- Current assessment practices reduce researchers' diversity

THE EVOLUTION OF ACADEMIA

PUBLISH



PUBLISH
OR
PERISH



PUBLISH
IN HIGH IMPACT
JOURNALS
OR
PERISH



PUBLISH
FREQUENTLY IN
HIGH IMPACT
JOURNALS
AND
MAYBE
YOU WON'T
PERISH



Why should we change ?

- Landscape is changing towards Open Science, based on exchange and sharing
- Assessment should take the OS principles into account.

Are there alternatives ?

- DORA, Leyden Manifesto
- Several theoretical paths
- Concrete initiatives

Yes indeed, but...

- Tells us what we sould't do any longer
- Not what we should do

Evaluation of Research Careers fully acknowledging Open Science Practices

Rewards, incentives and/or recognition for researchers
practicing Open Science

edited by

Conor O'CARROLL – Chair - Research Policy & Funding Consultant at SciPol and chair of the Steering Group on Human Resources and Mobility (SGHRM)

Bernard RENTIER – Vice-Chair - Recteur honoraire de l'Université de Liège - EUA Expert on Open Science

Cecilia CABELLO VALDES - FECYT – Spanish Foundation for Science and Technology

Fulvio ESPOSITO - University of Camerino

Eva KAUNISMAA - Ministry of Education and Culture

Katrien MAAS - League of Research Universities - LERU

Janet METCALFE - CRAC – Head of Vitae

David McALLISTER - Head of Skills & Careers at BBSRC/RCUK

Karen VANDEVELDE - University of Ghent

Contributions:

Isabelle HALLEUX - R&D Executive Director - University of Liege

Caroline Lynn KAMERLIN - Uppsala University

Norbert LOSSAU - member of OSPP/EUA – Vice-President of Göttingen University

Wainer LUSOLI - European Commission - RTD A6

Frank MIEDEMA - Utrecht University - chair of the MLE experts 'altmetrics and rewards'

Céline RAMJOUE - Head of Sector DG CNECT C3 - Digital Sciences

Sylvia SCHREIBER - PARISBERLIN EU correspondent Bureau Brussels

Paul WOUTERS - Leiden University

Assessment must be based on
MULTIPLE CRITERIA

1. Research output

- Research activity
- Publications
- Datasets
- Open source
- Funding

2. Research Process

- Stakeholder engagement/citizen science
- Collaboration & interdisciplinarité
- Research integrity
- Risk management

3. Service & Leadership

- Leadership
- Academic standing
- Peer review
- Networking

4. Research Impact

- Communication & dissemination
- IP (patents, licenses)
- Societal impact
- Knowledge exchange

5. Teaching and supervision

- Teaching
- Mentoring
- Supervision

6. Professional Experience

- Continuing professional development
- Project management
- Personal qualities

« MATRIX, NOT
METRICS »

OS-CAM, the Career Assessment Matrix

	R1	R2	R3	R4
Research output	+	++	+++	++++
Research Process	+	+++	++++	++++
Service & Leadership		+	+++	++++
Research Impact	+	++	+++	++++
Teaching and supervision	(++)	+	++	++++
Professional Experience		+	+++	++++

OS-CAC, the Career Assessment Cube

	Engineering	R1	R2	R3	R4
	Humanities	R1	R2	R3	R4
	Social	R1	R2	R3	R4
	Earth	R1	R2	R3	R4
Life Sciences	R1	R2	R3	R4	
Research output	+	++	+++	++++	
Research Process	+	+++	++++	++++	
Service & Leadership		+	+++	++++	
Research Impact	+	++	+++	++++	
Teaching & supervision	(++)	+	++	++++	
Professional Experience		+	+++	++++	

Sharing experience

- In universities
- Role for libraries, in synergy with researchers, monitoring impact (macro & micro)

Public authorities, funders, OA publishers, researchers: same combat

- Awareness of OS benefits and collateral damage
- Consensus on where we are, not yet on how to get where...
- Compliance of funders to O.S. principles is increasing but not fully enforced

Take-home message

It will be impossible
to implement Open Science harmoniously
without a large, significant and determined consensus
on new ways to evaluate research and researchers.

E-book freely available at:

<https://academie-editions.be/>

BERNARD RENTIER

OPEN SCIENCE,
THE CHALLENGE
OF TRANSPARENCY

Preface by Philippe Busquin



ACADÉMIE ROYALE DE BELGIQUE
Collection L'ACADÉMIE EN POCHE

Thank you !

<https://academie-editions.be/>

